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Introduction

It is commonly known that Internet growth rate is phenomenal. However, the number of online shopper is suspiciously low. Only 8 percent of Internet users made online purchasing in year 1995. This ratio dropped to 5 percent in year 1998 (Kerstetter, 1999). We can assume that the number of people making purchases over the Internet has remained constant, while the number of people using the Internet has grown substantially. Such number is the indicator of the urgent investigation of consumer's attitude toward online shopping.

The customary framework of Four P's (Product, Place, Price, and Promotion), proposed by McCarthy, seems inappropriate to explain consumer's overall attitude, since it is highly criticized that this framework focuses solely on the inside-out approach (Czinkota, 1997). The situation is more complicated, when E-commerce concept arises. Butler recommended that Internet marketers revisit and adjust the traditional model (Butler, 1998). Our objective in this study is to develop a new model reflecting Internet Shopper's attitude, by employing the outside-in approach. This research is then conducted with the attempt to find the underlying factors of attitude toward Internet Shopping and to provide the readers with the applicable implication.

Research Methodology and Proposed Model

Survey is the methodolgy in this research. We utilized the six point Likert-type scale, where 1=strongly disagree, 2=disagree, 3=somewhat disagree, 4=somewhat agree, 5=agree, and 6=strongly agree. Based on the review, 30 items measuring the attitude toward Internet Shopping within different aspects were developed. With the items from literatures, we believe that the overall attitude toward Internet Shopping consists of five underlying factors, demonstrated in the proposed model. (See Figure 1) They are Product, Price, Place, Protection, and Pleasure. The original Promotion construct from McCarthy's Framework is eliminated, since this activity is the perspective from the merchant's standpoint, not the consumer's. The items within each domain are presented as follows:

Product: Within this domain, we proposed five items. The are "Product Quality", "Product Variety", "Product Availability", "Product Customization" and "Product Trial". These items are from the comparioson between the virtual and conventional store in several literatures. They are Alba's, Elofson's, Peterson's (Alba et al., 1997; Elofson, 1998; Peterson et.al, 1997).

Price: This factor represents all costs derived from shopping online. Price probably has the most obvious effect on propensity to purchase. According to the law of demand, the quantity to purchase decreases, as the price increases. Both monetary and non-monetary items form this construct. They are "Product Cost (Price)", "Peripheral Costs", "Waiting Time", and "Number of Hours Spent for shopping", etc. Apparently, the idea of Price here in this study is broadened from McCarthy's framework.

It is claimed that Price of Online Product has to be lower, due to the low searching cost (Lee, 1998). Another consideration is number of shopping hours to spend. While shopping via the Internet can cut down the transportation cost, the consumer may have to spend considerable amount of time for surfing. When there is five times as much information on the web, it is five times as hard to retrieve the information as well (Evans, 1997). Therefore, the consumer's attitudes toward these items have to be investigated.

Place: As mentioned earlier, the computer terminal has an integrated function. It acts as a salesperson, demonstrates product, and so on. Then, the original concept of place is changed to conform to the comparison between the virtual store and conventional stores. This construct includes "Ease of Access", "Computer Accesibility", "Shopping Hours Accessibility", and "Sale People Accessibility".

Protection: Trust becomes the important issue and the most likely obstructive factor preventing the shoppers from online purchasing. We expect the result will show the negative attitude toward Internet Shopping.

A literature shows that 70 percent of respondent feel uncomfortable to give their credit card numbers over the web (Wong, 1998). The items in this construct include "Fraudulent Experience", "Safety of Personal Information", "Information Accuracy", and "Real Existence of the Stores", etc.

Pleasure: There appears to be several reasons explaining why consumers shop. Self-Gratification (Berkman, et al., 1996) is the original idea forming this construct. Self-Gratification suggests the pleasure that people can acquire from shopping activities. As surfing the Internet, people are seemingly isolated from the social and surrounding people. However, the optimistic side of shopping online is included in this construct as well. Microcomputer Playfulness (Webster et al., 1992) was added to create a questionnaire item. People may find it easy and fun, when they become Internet users (Nahl, 1996). Then, the items for this construct are "Social Interaction", "Group Interaction", 'Excitement", "Shopping Hours Quality", and "Ease of Understanding the Context".

From the total of 30 items, two global items are included in the questionnaire survey. They are "Overall Preference" and "Perceived Satisfaction". The following is the proposed model of Internet Shopper's Attitude.

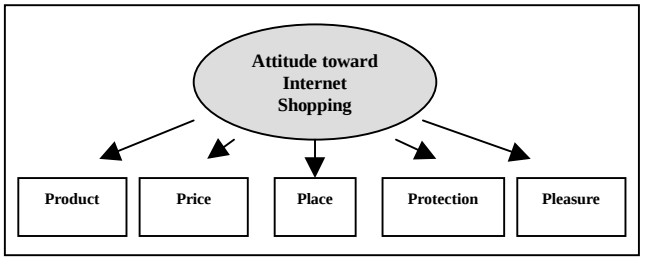

Figure 1: Proposed Model of Consumer's Overall Attitude toward Internet Shopping

The pilot study was conducted by distributing 32-item instrument to both undergraduate and graduate students. The sample of 37 students was asked to complete the survey. Then, the correlation analysis between 2 global items and the other items was performed. The correlation of 0.35 between global items and each non-global item was used as our criteria for developing the final questionnaire. This standard is subjective, by yet provides us with the guideline for final questionnaire design. With this criterion, 20 items were dropped from 30 non-global items, due to their low correlation and similar meaning. Later, the final questionnaire survey was distributed and a sample of 106 students was collected. SPSS was employed to perform the factor analysis. The subjects were additionally asked if they view the virtual store and physical store under the similar name as two separate stores (Question I), and if they surf the Internet just for gathering information, then go shopping at the physical stores (Question II).

Data Analysis

The sample group contains 56 males (52.8%) and 50 females (47.2%). While more than 75 percent of them (80 subjects) has computer and Internet access at home, it is surprising that more than 40 percent has no online shopping experience. In addition, 55 students agree that they view both virtual and physical stores under the same name as one store, 21 students view them as separate ones, and 30 of them answered "I have no idea". Question II shows that 45 students do agree, 52 students do not agree that they use the Internet just for gathering information, and 9 students chose "I have no idea".

With these 106 subjects and 10 items, we have the high ratio of sample size to number of items approximately 10:1. Furthermore, Bartlett's sphericity has the Chi-square value of 150.42 with the degree of freedom of 45 at 0.000 significance level. This proves that the factor analysis is worth pursuing. To do so, Principal Component Analysis and Varimax were employed as the extraction technique and rotation method respectively. Initially, SPSS produced 4 factors with no logical meaning. We then specified number of factor equal to 5 and the following is the table of factors and their eigenvalues.

Table 1: Five Underlying Factors and Eigenvalues

Factors	1	2	3	4	5
Eigenvalue	2.38	1.47	1.25	1.07	0.97

With these five specified factors, the model can explain 71.670 percent of variance. Table 2 shows the factor loading of the items on each labeled factors, without the loading value less than 0.30. The italic bold numbers represent the chosen items forming each individual factor.

From table2, A1 and A2 contain the means that demonstrate the neutral attitude toward the difference of product offered by the virtual and physical stores. Since most students view these two different stores, with similar name, as the same one, it is rational to believe that the product offered via the Web is not different from the one sold in regular store. The protection factor conforms to the literature as well, but demonstrates the negative attitude toward Internet Shopping in term of trust.

Practical Application

In order to increase the number of Internet Shopper, trust issue can be considered the most important one due to the relatively high value of means (agree). While academicians and practitioners are improving the fantastic security technology, Internet users still believe that the hackers are still wandering through the network and waiting for the chance to steal their valuable information. Consequently, persuading Internet user to believe that they are isolated from Internet hackers is more critical.

The newness and playfulness of Internet together with interactive technology, for example CGI, make online shopping more pleasant than ever. Nonetheless, it has to be kept in mind that all technologies will become old one day and people will get used to the current technology. The present technology will grow boring for the later years. Enhancing the entertaining function of the Internet by providing the user with the opportunity to have social interaction is the solution. Such interaction is different from the interaction that we currently have from the virtual company. With the promising increase in bandwidth, allowing people to chat while they are shopping online may be the starting point of Internet Shopping Social Interaction. By improving protection and pleasure, Internet Shopping will eventually become the effective transactional tool in the next era.

Conclusion

This study presents the new model measuring the attitude toward Internet Shopping. The proposed model is confirmed by the Factor Analysis and named as Five Ps model (5 Ps). Data proves that protection and pleasure must be added in order to follow the outside-in approach. The model is achieving the logical interpretation domain as well. However, the future study should be conducted with more generalizable, but yet meaningful sample group. In term of academic research, this model can be employed and incorporated with several current studies in the area of Electronic Commerce. For the practitioners, the result suggests that, before the Internet and computer become a necessity in human life, strengthening trust and enhancing Internet's playfulness should be a common concern to bothInternet developer and the virtual company. Finally, we encourage the researchers to investigate Internet Shopper's Attitude continually, since attitude in this environment can change drastically over a short period of time.

Reference is available upon request from the author.

Table 2: Rotated Factor Matrix

Item Code	Factor1 (Product)	Factor2 (Place)	Factor3 (Protection)	Factor4 (Price)	Factor5 (Pleasure)
Product Variety (A1)	***.815***	---	---	---	---
Product Availability (A2)	***.859***	---	---	---	---
Sale People Accessibility (B1)	-----	***.732***	---	---	---
Computer Accessibility (B2)	-------	***.754***	---	---	---
Fraud (C1)	---	.510	***.665***	---	---
Real Existence (C2)	---	---	***.860***	---	---
Waiting Time (D1)	---	---	---	***.725***	.367
Peripheral Costs (D2)	---	---	---	***.741***	---
Social Interaction (E1)	---	---	---	---	***.862***
Playfulness (E2)	.441	---	---	---	***-.511***

Table 3: Item's Mean and Standard Deviation

	A1	A2	B1	B2	C1	C2	D1	D2	E1	E2
Mean	3.330	3.066	4.443	4.821	4.462	3.745	2.481	3.557	2.689	3.896
Std. Deviation	1.452	1.289	1.324	1.446	1.402	1.317	1.429	1.428	1.396	1.359